## Claim Amendments

Please amend claims, 1, 3, 4, 6, 9, 11, 14, 15, 18, and 19 as follows.

Please cancel claims 2, 8, 10, 16, 17, and 20 as follows.

Please add new claim 21 as follows:

## Claims as Amended

1. (currently amended) A method for reducing acidic contamination on a process wafer and in an unloading chamber following a plasma etching process to reduce acidic residue contamination comprising the steps of:

providing an ambient controlled heating chamber separate from an etching chamber and unloading chamber for accepting transfer of a process wafer under controlled ambient conditions prior to transfer to the unloading chamber;

transferring the process wafer to the heating chamber under controlled ambient conditions following plasma etching of the process wafer;

providing a heat exchange surface comprising a wafer support plate within the heating chamber for ~~mounting the process wafer in heat exchange relationship thereto~~ heating the process wafer;

~~mounting the process wafer on a heat exchange surface contained within the heating; and,~~

heating the process wafer by supplying a heat exchange fluid through the wafer support plate to heat the process wafer ~~to a temperature sufficient~~ to vaporize ~~an~~ acidic residue ~~thereon~~ remaining on the process wafer from the plasma etching process to form acidic vapors; and,

simultaneously applying a vacuum pressure to the heating chamber to remove~~ing~~ the acidic vapors from the heating chamber.

2. (cancelled)

3. (currently amended) The method of claim 1[2], wherein ~~the steps of heating the process wafer and removing the acidic vapor are carried out for a period of time sufficient to remove from~~ about 50 percent to about 100 percent of the acidic residue is removed.

4. (currently amended) The method of claim 1, ~~wherein~~ further comprising the step of ~~transferring the process wafer to the heating chamber is carried out prior to~~ transferring the process wafer to ~~an~~ the unloading chamber for unloading the process wafer.

5. (original) The method of claim 1, wherein the process wafer is heated within a temperature range of about 75 degrees Centigrade to about 100 degrees Centigrade.

6. (currently amended) The method of claim 5, wherein the vacuum pressure comprises ~~ambient pressure within the heating chamber is maintained within a range of~~ about 10 milliTorr to 500 milliTorr.

7. (original) The method of claim 6, wherein the step of heating the process wafer is carried out for a period of about 30 to about 90 seconds.

8. (cancelled)

9. (currently amended) The method of claim 1 [8], wherein the heat exchange fluid is supplied ~~in fluidic communication with~~ at a selected flow rate and fluid temperature by a heat exchanger.

10. (cancelled)

11. (currently amended) The method of claim 9 [10], wherein at least one of the heat exchange fluid flow rate and the heat exchange fluid temperature is ~~controllably selected by a computer~~ adjusted in response to a sensed fluid flow rate and a sensed fluid temperature.

12. (original) The method of claim 1, wherein the step of transferring the process wafer to the heating chamber is effectuated by a means for remotely manipulating the process wafer under controlled ambient conditions.

13. (original) The method of claim 1, wherein the acidic residue is selected from the group consisting of HBr, HCl and HF.

14. (currently amended) A heating chamber system for reducing plasma etching residue to avoid acidic contamination on a process wafer and in a loadloack chamber following a plasma etching process comprising:

an ambient controlled heating chamber separate from an etching chamber and a loadlock chamber for accepting transfer of a process wafer under controlled ambient pressure conditions following a plasma etching process;

~~a means for controlling an ambient pressure within the heating chamber including a pressure;~~

a ~~heat exchange surface~~ wafer support plate disposed within the heating chamber for mounting the process wafer ~~in heat exchange relationship~~;

a heat exchanger disposed externally to the heating chamber ~~in fluidic communication with the heat exchange surface~~ for controlling a temperature of a heat exchange fluid passed through the wafer support plate;

~~a fluidic communication flow path between the heat exchanger and the heat exchange sur~~face;

~~a means for sensing a fluid flow disposed within the fluidic communication flow path between the heat exchanger and the heat exchange surf~~ace;

~~a means for sensing a fluid temperature disposed within the fluidic communication flow path between the heat exchanger and the backside of the heat exchange surface; and,~~

a means for supplying a continuous flow of the heat exchange fluid~~a fluid flow disposed within the fluidic communication flow path between the heat exchanger and the heat exchange surface~~;

whereby, the process wafer temperature and the ambient pressure may be simultaneously controlled to vaporize and remove plasma etching residues from the process wafer.

15. (currently amended) The heating system of claim 14 [20], further comprising a controller ~~in electronic communication with at least the means for sensing a fluid flow~~ for controlling a condition selected from the group consisting of a heat exchange fluid flow rate, a heat exchange fluid temperature, and an ambient pressure.

16. - 17. (cancelled)

18. (currently amended) The heating system of claim [20] 14, wherein the heating chamber is in ambient controlled communication with a plurality of plasma etching chambers for carrying out plasma etching.

19. (currently amended) The heating system of claim 18, further comprising a means for remotely transferring a process wafer under controlled ambient conditions between the plurality of plasma etching chambers including the heating chamber.

20. (cancelled)

21. (new) The heating system of claim 14, wherein the means for pumping comprises a means for sensing an interruption in heat exchange fluid flow.